



The National Park Service  
Alaska Region  
**Inventory & Monitoring Program**

## **Specifications for Annual Progress Reports and Final Reports Submitted to the Alaska Inventory and Monitoring Program**

### **Alaska Region**

National Park Service  
Alaska Region Inventory & Monitoring Program  
250 West 5<sup>th</sup> Avenue  
Anchorage, Alaska 99501

Version: December 2003

**File Name:** AKRO\_2003\_ReportAnnualFinalSpec\_0312.doc

**Recommended Citation:**

Alaska Regional Office. 2003. Specifications for annual progress reports and final reports submitted to the Alaska Inventory and Monitoring Program, Alaska Region. National Park Service. Anchorage, AK. 9 pg.

**Topic(s):**

Administrative, Interdisciplinary

**Theme Keywords:**

Reports, protocols, guidelines

**Placename Keywords:**

Alaska, Arctic Network, Central Alaska Network, Southeast Alaska Network, Southwest Alaska Network

**Acronyms:**

AKRO	Alaska Regional Office
AKSO	Alaska Region Support Office
ARLIS	Alaska Resource Library and Information Services
CBE	Council for Biological Editors
GIS	Geographic Information System
HTML	HyperText Markup Language
I&M	Inventory & Monitoring (Program)
ITIS	Integrated Taxonomic Information System
NAD27	North American 1927 Datum
NPS	National Park Service
PDF	Adobe Portable Document Format

**Initial Distribution:**

Alaska Region Inventory and Monitoring Program, Guidelines Website:  
[http://www.nature.nps.gov/im/units/AKRO/products/Products\\_regional.htm](http://www.nature.nps.gov/im/units/AKRO/products/Products_regional.htm)

## Table of Contents

<b>Introduction</b>	<b>1</b>
<b>Report Format</b>	<b>1</b>
<b>Order and Construction of Paragraphs</b>	<b>4</b>
<b>Construction of Tables</b>	<b>4</b>
<b>Figures</b>	<b>4</b>
<b>Computer Software and Page Formatting</b>	<b>5</b>
<b>Submission Procedure and Timeline</b>	<b>6</b>
<b>Literature Cited</b>	<b>7</b>
<b>Appendix A</b>	<b>8</b>

## INTRODUCTION

The purpose of natural resource inventories and long-term monitoring is to provide park managers with information in a timely and clearly defined fashion. Information is powerful only when it is transferred and used. Data summaries and annual reports provide an assessment of the condition of Park ecosystems. They also provide an early warning signal of ecosystem changes and allow managers and researchers to compare results. Annual and semi-annual reporting facilitates public education, outreach programs, and garners support for sustained funding of long-term monitoring. Final and interim reports are a requirement of the National Park Service and other funding sources.

Effective reporting requires a consistent format, defined time schedule, and an internal review process. The following guidelines will apply to all interim and final reports produced for the Alaska Inventory and Monitoring Program.

## REPORT FORMAT

Annual progress reports and final reports should be organized to include the following sections and headings. Additional guidelines on report organization and language can be obtained by reviewing *Suggestions for the composition of technical reports in the natural-resource sciences*, Rockwell (1994).

### Title Page

- Project Title [use title case and bold], must include names of the I and M Network, Park(s), state(s) and subject(s) of study (*see example, Appendix I*)
- Author(s) [first name, middle initial(s), surname; no professional titles or academic degrees
- Avoid the use of "by"
- NPS Report Series Number and/or Project Number [if assigned by designated NPS Key Official]
- Author's Organization Mailing Address
- Month/Year
- Contract or Agreement Number [include Supplemental Agreement Number, if applicable]
- Funding Source(s)

## **Second Page**

- File name (discussed later in this document)
- Recommended Citation
- Topics
- Theme Keywords
- Placename Keywords
- List of Acronyms
- Initial Distribution

## **Recommended Citation**

Use name-and-year system citation format:

Name, Author T. Year. Project Title. Report Series Number. National Park Service.  
Anchorage, AK. 999 pg.

## **Topics**

Optional. Include at least one topic and subtopic.

### **Topic**

- Administrative
- Monitoring
- Inventory
- Synthesis
- Research

### **Subtopic**

- Air
- Biological
- Geological
- Water
- Weather
- Interdisciplinary
- Sample Design
- Information Management

## **Theme Keywords**

Three to six words from the Project Title and a few more related terms to describe the common and scientific names of species, and subject of study (inventory, population dynamics, density estimation).

## **Placename Keywords**

Three to six words to describe the geographic area. At a minimum, this should include Alaska, the name of the parks, and the network.

## **List of Acronyms**

A list of acronyms should be included if more than 20 acronyms are used the report. All acronyms should be spelled out when initially used in the report.

## **Initial Distribution**

Optional. List the initial distribution of the report, such as the receiving NPS office, the Alaska Resource Library and Information Services (ARLIS), and websites.

## **Abstract**

- Recommend length is the shorter of 250 words or 3% of the length of the report
- Briefly but concisely identifies the authors objectives and methods, lists the principle results and states the major conclusions
- Includes scientific names of major organisms

## **Executive Summary**

- Reports greater than three pages should include an *Executive Summary* in addition to an abstract
- This section is often removed from the report and used by the Park Superintendent to inform legislators, the general public, park staff, regional, and Washington Office staff of the completion and results of the study. Authors should consider this audience when preparing an executive summary and assure that its contents all it to stand alone as a “condensed report.”

## **Introduction**

- Briefly but concisely outlines the topic of the report
- States the reason for the study, inventory, or monitoring effort
- Concludes with listing of the objective(s)

## **Methods and Materials**

- The methods section is comparable to a recipe. All materials, software, and methods must be described in a level of detail that would allow someone else to repeat the investigation or inventory.
- States the period of the study or inventory
- Gives the location and a description of the study area or monitoring sites
- References standard procedures; if described, descriptions of standard procedures are summaries
- Lists the type and reason for statistical tests that were used and the  $P$ -value for level of accepted significance

## **Results**

- Presents a systematic description of results in the same order as the description of methods
- Does not include descriptions of iterations of methods, discussions, or conclusions
- Acknowledges differences at  $P \leq 0.05$  or at an otherwise stated level of significance
- Summarizes contents of each table in one to three statements, followed with the table number in parentheses (readers are not merely referred to tables to fend for themselves)

## Discussion

- Focuses on the purpose of the study
- Addresses the objectives
- Presents the principles, relations, and generalizations that the results revealed
- Points out exceptions or lack of relations and defines unsettled points
- Shows how results and interpretations agree or contrast with those in previously published works
- Presents a tightly reasoned argument in crisp, clear sentences and in a logical sequence of paragraphs

[New or continuing projects may not always have tangible results to report. In this case, a section entitled **Progress** may be used in lieu of Results and Discussion heading(s).]

## Plans for Coming Year

- Progress Reports must include a section that identifies work planned for the forthcoming year
- This section may also include **Recommendations**, such as suggestions from the authors for improvements in training, logistics, survey schedules, or other information useful to park support staff or investigators conducting similar field work.

## Acknowledgments

Only direct help with research or writing is acknowledged. Acknowledgment of keyboard operators, illustrators, editors, and reviewers is discouraged. However, financial support for the work may be acknowledged here. Only forename initials with the surname are given. Professional titles or academic degrees are not included.

## Literature Cited

On a new page, provide complete name-and-year system citations in alphabetical order for published literature referenced in the report.

For example:

Handel, C., and R. Gill. 2001. Black Turnstone ( *Arenaria melanocephala*). In The Birds of North America, no. 585 (A. Poole and F. Gill, eds.). The Birds of North America, Inc., Philadelphia, PA.

## Appendices

Provide any necessary appendices, such as Standard Operating Procedures referred to in the methods section.

## ORDER AND CONSTRUCTION OF PARAGRAPHS

The paragraphs under each heading or subheading must be in a recognizable order. Common types of order (Hacker 1991) are by chronology or by another scale of time, by space, or by complexity. Whereas the methods and results are best described in chronological order, the components of a discussion may best be given in order of complexity. Logic also frequently dictates the order of paragraphs-notably in introductions (which explain the reasons for a study) and in discussions (which set forth arguments).

Use paragraph headings and subheadings descriptive of the text matter to which they apply and use no more than three categories or levels of importance. First-level headings are in upper-case letters, are left-justified, and may be in bold type. Second-level headings also are left-justified but only the first letter of each word is upper-case. Third-level headings also have the first letter of each word upper-case, but are indented five spaces, underlined or italicized.

*For example:*

Most important: **FRESHWATER LAKES**

Second most important: **Lake Clark**

Third most important: ***Hardenburg Bay***

All bulleted items must be indented one tab space and should be on the same page when possible. Avoid the use of underlined text except for internet, e-mail links, and other special text.

## CONSTRUCTION OF TABLES

A properly constructed and oriented table is reader friendly and eases the comprehension and the comparison of data. Each table must stand independently from the rest of the paper (CBE Style Manual Committee 1983). For this reason, the table must include the location and dates of the study, scientific names of organisms, and other pertinent information. Values should be oriented vertically because comparisons of data are easier down columns than across rows. The units of measure are usually stated in the box heading to avoid clutter in the columns.

## FIGURES

Like tables, figures must stand independently from the rest of the paper (CBE Style Manual Committee 1983), and each figure caption must include the location and dates of study, scientific names of organisms, and other pertinent information. Whether figures are line drawings or photographs, they must be originals and of professional

quality. The lettering style in a series of line drawings must be uniform. Hard copies of computer-generated figures must be accompanied by a diskette (or CD) and identification of the software.

### ***Measurement Units--***

- All measurement units must be metric.
- Include U.S. equivalent measurements parenthetically.
- Use abbreviated standard units of measure when with a numeral, whereas, units of measure are to be spelled out if no quantity is given (e.g. "10 m" or "...meters").
- Retain only the final unit of measure in a series (e.g. 10 to 15 kg).
- Use a "/" for ratios with numbers (e.g. 10 muskoxen/ha) but use "per" for ratios without numbers (e.g. muskoxen per hectare).

### ***Numbers--***

- Numbers from one through nine are written out; numbers above nine are expressed as numerals except when first word of sentence. Ordinal numbers (e.g. second, 23rd) are treated the same.
- Physical measurements (length, width, distance, area, volume, decimals, percentages, degrees, symbols, latitude/longitude, fractions over one) and time (days, years) are always expressed as numerals.

### ***Coordinates--***

- Express coordinates as Latitude and Longitude in decimal degrees, followed by the Datum. For example: 58.345678N; 149.123456W, (NAD27)
- Figures that include map products should state the projection and Datum. For example: Alaska Albers Projection on the North American 1927 Datum

### ***Taxon Names--***

- The NPS has adopted ITIS (Integrated Taxonomic Information System) as its standard for taxonomy and nomenclature, and all scientific names should follow that standard. See <http://www.itis.usda.gov/plantproj/itis/index.html>
- Use common species names of plants and animals initially followed with scientific names parenthetically; thereafter, only the common name is necessary.

## **COMPUTER SOFTWARE AND PAGE FORMATTING**

### **File Format**

The Microsoft Word *\*\*\*.doc* file is the NPS standard for word processing and all reports and documents must be delivered in MS Word/Excel and PDF or HTML electronic format as specified. MSWord-derived HTML must be cleaned of Word-specific markup and reformatted as necessary before submittal. Use Tahoma or Arial 12 pt font and double-space draft final reports and single-space final reports. All linked images and figures must be attached with relative links to the document, for

example "\photos\muskox\_calf.jpg". Each numbered page should include a header that lists the report title (can be abbreviated), date, and name of the inventory and monitoring network.

## **File Name**

Report files should be named in the following manner:

AuthorLastNameFirstInitial\_YEAR\_ParkCode\_BriefTitle\_version.doc

AuthorLastName = The first author's last name or the agency office (i.e., AKRO)

FirstInitial = First initial of the first author.

YEAR = Four digit year of the publication date.

ParkCode = Four letter park code

BriefTitle = Provide a descriptive, but brief title. Concatenate with capital letters and no spaces.

Version = Date formatted as YYMMDD. DD is optional.

For example: MillerJ\_2003\_ALAG\_FreshFishReprt\_0303.doc

Electronic files of any type should not be named with spaces or special characters.

For more information, review the *Recommended Naming Standards* by Angie

Southwood, available at:

[www.nature.nps.gov/im/units/swan/Documents/Data\\_Management/im\\_naming\\_guide.pdf](http://www.nature.nps.gov/im/units/swan/Documents/Data_Management/im_naming_guide.pdf)

## **Data Standards**

The National Park Service has adopted specific word processing, database, and geographic information systems (GIS) software as standards to promote compatibility and sharing of data among parks and promote the development of data management tools to make information more accessible. For more information see the separate *Database Specifications* and *GIS Standards*.

## **SUBMISSION PROCEDURE AND TIMELINE**

Submit draft and final reports in digital format (compressed zip) and hardcopy. Draft reports will undergo internal review and final reports external review. The Network Coordinator will review and seek additional review from other NPS and external scientists to ensure quality reporting. The Network Coordinator will ensure that the review follows standards developed by the Inventory and Monitoring Program. Comments and recommended changes will then be returned to the author(s) for consideration and preparation of the final report.

Additional draft guidance can be found on the NPS Intranet site at:

[www1.nrintra.nps.gov/pub-page/handbook/index.htm](http://www1.nrintra.nps.gov/pub-page/handbook/index.htm)

## **LITERATURE CITED**

CBE Style Manual Committee. 1983. CBE Style Manual: a guide for authors, editors and publishers in the biological sciences, 5<sup>th</sup> edition. Council of Biology Editors, Inc., Bethesda, Md. 324 pg.

Hacker, D. 1991. The Bedford handbook for writers. Bedford Books of St. Martin's Press, Boston, MA 689 pg.

Rockwell, E.D. 1994. Suggestions for the composition of technical reports in the natural-resource sciences. National Biological Survey Fish and Wildlife Leaflet 19. 34 pg.

Draft Natural Resource Publication Management Handbook, National Park Service, Inventory and Monitoring Program, Ch. 6. Available at:  
<http://www1.nrintra.nps.gov/pub-page/handbook/index.htm>

## **APPENDIX A**

Example of Title Page and Second Page

# **Understanding Climate Change Effects on Wholly Mammoths (Mammuthus primigenius) at Twin Lakes, Lake Clark National Park and Preserve, Southwest Alaska Inventory and Monitoring Network**

Iam A. Dinosaur  
Alaska Prehistoric Program  
99 Bones Place  
Twin Lakes, AK 99999

August 2002

National Park Service  
Southwest Alaska Network  
Inventory and Monitoring Program

NPS Report Series Number: NPS/AKRSWAN/NRTR-2002/01  
Project Number: SWAN-99999

Contract or Agreement Number XXXX

Funding Source(s):  
Inventory & Monitoring Program, National Park Service

**File Name:** Dinosaur\_I\_2002\_ClimateChangeWhollyMammothsSWAN\_0208.doc

**Recommended Citation:**

Dinosaur, Iam A. 2002. Understanding climate change effects on wholly mammoths (Mammuthus primigenius) at twin lakes, Lake Clark National Park and Preserve, Southwest Alaska Inventory and Monitoring Program. NPS/AKRSWAN/NRTR-2002/01. National Park Service. Anchorage, AK. 80 pg.

**Topic(s):**

Synthesis, Weather, Biologic

**Theme Keywords:**

Climate change, climate, wholly mammoths, Mammuthus primigenius

**Placename Keywords:**

Alaska, Southwest Alaska Network, Lake Clark National Park and Preserve, LACL, SWAN, twin lakes

**Acronyms:**

GIS	Geographic Information System
I&M	Inventory & Monitoring (Program)
ITIS	Integrated Taxonomic Information System
LACL	Lake Clark National Park and Preserve
NPS	National Park Service
SWAN	Southwest Alaska Network

**Initial Distribution:**

- Lake Clark National Park and Preserve – 1 hardcopy, 1 electronic
- Southwest Alaska Network – 1 hardcopy, 1 electronic
- Alaska Resource Library and Information Services (ARLIS) – 4 hardcopies, 1 electronic